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#### PROJECT NO. 52373

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## REVIEW OF WHOLESALE ELECTRIC MARKET DESIGN

PUBLIC UTILITY COMMISSION OF TEXAS

## JOINT COMMENTS OF TEXAS SOLAR POWER ASSOCIATION AND SOLAR ENERGY INDUSTIES ASSOCIATION

Lancium is a technology company headquartered in Houston, Texas that allows data centers to be highly dispatchable and provide ancillary services. In 2020, a Lancium enabled data center in Big Spring, Texas was qualified as the world's first Load-only, Controllable Load Resource. Lancium has recently broken ground on a new 325 MW data center in Fort Stockton, Texas.

With Lancium's technology, data centers can provide any ancillary service required by ERCOT, and reduce load based on prices on a regular basis, as needed. This results in a lower overall cost to serve data center needs. Lancium is investing in Texas because of the competitive market in Texas, the rewards for demand response, and the overall availability of low-cost electricity.

- 3. Should ERCOT develop a discrete fuel-specific reliability product for winter? If so, please describe the attributes of such aproduct, including procurement and verification processes.
- a. How long would it take to develop such a product?
- b. Could a similar fuel-based capability be captured by modifying existing ancillary services in the ERCOT market?

Any new reliability product needs to be provided in a technology neutral way. For example, a 200 MW natural gas facility could have higher reliability if it installed new fuel storage. But that same level of reliability could be provided – perhaps for cheaper – by also allowing a 200 MW load to be paid to reduce load during the same winter events. In general, any new ancillary or reliability service must be procured in a technology neutral, non-discriminatory way.

4. Are there alternatives to a load serving entity (LSE) Obligation that could be used to impose a firming requirement on all generation resources in ERCOT?

As much as possible, the ERCOT market should firm itself through market activities. For example, an LSE that contracts with Lancium could buy a call option for load reduction without the need for complex regulatory mechanisms. ERCOT could buy additional ancillary services to manage uncertainty, using similar mechanisms to how it manages uncertainty today, but to a greater degree. However, the State must be diligent to not increase costs so much that new loads are reluctant to invest in Texas.

- 6. How can an LSE Obligation be designed to protect against the abuse of market power in the wholesale and retail markets?
  - a. Will an LSE Obligation negatively impact customer choice for consumers in the competitive retail electric market in ERCOT? Can protective measures be put in place to avoid a negative impact on customer choice? If so, please specify what measures.
  - b. How can market power be effectively monitored in a market where owners of power generation also own REPs that serve a large portion of ERCOT's retail customers?
  - c. What is the impact on self-supplying large industrial consumers who will have to comply with the LSE Obligation and will it impact their decision to site in Texas?
  - d. What is the impact of an LSE Obligation on load-serving entities that do not offer retail choice, such as municipally owned utilities or electric cooperatives?
  - e. Can market power be monitored in the bilateral market if an LSE Obligation is implemented in ERCOT? Can protective measures be put in place to ensure that market power is effectively monitored in ERCOT with an LSE Obligation? If so, please specify what measures.
  - f. Should the LSE Obligation include a "must offer" provision? If so, how should it be structured?

Imagine an REP that exclusively served Lancium type loads that are fully controllable and can curtail almost instantaneously in response to grid conditions. If the new LSE Obligation increased the cost for this hypothetical REP, then it clearly would be bad policy. These loads are fully dispatchable – but as demand response they may receive less accreditation than other resource types, so would still have to buy additional credits to cover their LSE Obligation. This simple example illustrates why the proposal on the table harms customers that are attempting to deliver the maximal dispatchability and reliability to ERCOT.

This Lancium test – what happens to an LSE that has only fully dispatchable loads? should be the basis for policymaking around market reform that seeks to increase dispatchability in the ERCOT market.

# 9. How can the LSE Obligation be designed to ensure demand response resources can participate fully and at all points in time?

It's not clear that it can be, so long as the demand response accreditation is administratively set to be less than the demand that is responding. See above. At best, a load can break even for demand response obligations, and then the responsive loads still aren't rewarded for curtailing – just not charged (because the payments are equivalent to the costs). The load response could still be paid if they are able to sell back a hedge into the real time market when curtailed, but this mechanism already exists in the ERCOT market and is not an added feature of the proposed LSE Obligation.

### 14. How long will the LSE Obligation plan take to implement?

The LSE Obligation could hamper the ability of ERCOT to deliver on other priorities, like real-time co-optimization, or new ideas, such as the 168-hour forward market suggested by the

ERCOT Innovation Caucus. These mechanisms work within the ERCOT ancillary services market to increase reliability, rather than as an extra regulatory mechanism outside of the market.

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